

Notice of Meeting

Coastal and ICOLL Advisory Committee Meeting

A Coastal and ICOLL Advisory Committee Meeting of Byron Shire Council will be held as follows:

Venue	Conference Room, Station Street, Mullumbimby
Date	Thursday, 30 June 2022
Time	11.30am

Shannon Burt
Director, Sustainable Environment and Economy

I2022/753
Distributed 23/06/22



BYRON
SHIRE

CONFLICT OF INTERESTS

What is a “Conflict of Interests” - A conflict of interests can be of two types:

Pecuniary - an interest that a person has in a matter because of a reasonable likelihood or expectation of appreciable financial gain or loss to the person or another person with whom the person is associated.

Non-pecuniary – a private or personal interest that a Council official has that does not amount to a pecuniary interest as defined in the Code of Conduct for Councillors (eg. A friendship, membership of an association, society or trade union or involvement or interest in an activity and may include an interest of a financial nature).

Remoteness – a person does not have a pecuniary interest in a matter if the interest is so remote or insignificant that it could not reasonably be regarded as likely to influence any decision the person might make in relation to a matter or if the interest is of a kind specified in the Code of Conduct for Councillors.

Who has a Pecuniary Interest? - a person has a pecuniary interest in a matter if the pecuniary interest is the interest of the person, or another person with whom the person is associated (see below).

Relatives, Partners - a person is taken to have a pecuniary interest in a matter if:

- The person's spouse or de facto partner or a relative of the person has a pecuniary interest in the matter, or
- The person, or a nominee, partners or employer of the person, is a member of a company or other body that has a pecuniary interest in the matter.

N.B. “Relative”, in relation to a person means any of the following:

- (a) the parent, grandparent, brother, sister, uncle, aunt, nephew, niece, lineal descends or adopted child of the person or of the person's spouse;
- (b) the spouse or de facto partners of the person or of a person referred to in paragraph (a)

No Interest in the Matter - however, a person is not taken to have a pecuniary interest in a matter:

- If the person is unaware of the relevant pecuniary interest of the spouse, de facto partner, relative or company or other body, or
- Just because the person is a member of, or is employed by, the Council.
- Just because the person is a member of, or a delegate of the Council to, a company or other body that has a pecuniary interest in the matter provided that the person has no beneficial interest in any shares of the company or body.

Disclosure and participation in meetings

- A Councillor or a member of a Council Committee who has a pecuniary interest in any matter with which the Council is concerned and who is present at a meeting of the Council or Committee at which the matter is being considered must disclose the nature of the interest to the meeting as soon as practicable.
- The Councillor or member must not be present at, or in sight of, the meeting of the Council or Committee:
 - (a) at any time during which the matter is being considered or discussed by the Council or Committee, or

- (b) at any time during which the Council or Committee is voting on any question in relation to the matter.

No Knowledge - a person does not breach this Clause if the person did not know and could not reasonably be expected to have known that the matter under consideration at the meeting was a matter in which he or she had a pecuniary interest.

Non-pecuniary Interests - Must be disclosed in meetings.

There are a broad range of options available for managing conflicts & the option chosen will depend on an assessment of the circumstances of the matter, the nature of the interest and the significance of the issue being dealt with. Non-pecuniary conflicts of interests must be dealt with in at least one of the following ways:

- It may be appropriate that no action be taken where the potential for conflict is minimal. However, Councillors should consider providing an explanation of why they consider a conflict does not exist.
- Limit involvement if practical (eg. Participate in discussion but not in decision making or vice-versa). Care needs to be taken when exercising this option.
- Remove the source of the conflict (eg. Relinquishing or divesting the personal interest that creates the conflict)
- Have no involvement by absenting yourself from and not taking part in any debate or voting on the issue as of the provisions in the Code of Conduct (particularly if you have a significant non-pecuniary interest)

RECORDING OF VOTING ON PLANNING MATTERS

Clause 375A of the Local Government Act 1993 – Recording of voting on planning matters

- (1) In this section, **planning decision** means a decision made in the exercise of a function of a council under the Environmental Planning and Assessment Act 1979:
- (a) including a decision relating to a development application, an environmental planning instrument, a development control plan or a development contribution plan under that Act, but
- (b) not including the making of an order under that Act.
- (2) The general manager is required to keep a register containing, for each planning decision made at a meeting of the council or a council committee, the names of the councillors who supported the decision and the names of any councillors who opposed (or are taken to have opposed) the decision.
- (3) For the purpose of maintaining the register, a division is required to be called whenever a motion for a planning decision is put at a meeting of the council or a council committee.
- (4) Each decision recorded in the register is to be described in the register or identified in a manner that enables the description to be obtained from another publicly available document, and is to include the information required by the regulations.
- (5) This section extends to a meeting that is closed to the public.

BYRON SHIRE COUNCIL
BUSINESS OF MEETING

1. APOLOGIES

2. DECLARATIONS OF INTEREST – PECUNIARY AND NON-PECUNIARY

3. STAFF REPORTS

Sustainable Environment and Economy

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Report No. 3.1 Update on the development of Coastal Management Programs (CMPs) for the Byron Shire Coastline

Directorate: Sustainable Environment and Economy

Report Author: Chloe Dowsett, Biodiversity and Sustainability Coordinator
Orla Seccull, Coastal & Estuary Officer

File No: I2022/61

Summary:

Council is in the process of preparing Coastal Management Programs (CMPs) for its parts of the Byron Shire coastline. The CMPs will set out long-term strategy for the coordinated management of the coastal zone by Council and public authorities and will consolidate the funding and delivery of priority management actions to balance the environmental, cultural, recreational and economic needs of the coastal zone and to adapt to emerging issues such as population growth and climate change. Preparation of CMPs is a five-stage process which can take several years to complete.

The CMP five stage process was created by legislative reforms in 2016, though the legislation was not fully enacted until 2018. At the time it was expected that the new process would enable a Council to work through the five stages in up to 3 years. Council embarked on the development of a CMP for the Northern Shire (excluding the Brunswick River estuary) in 2018 and Southern Shire in 2020. In this time Council has only progressed through Stage 1 and into Stage 2 for these parts of the Shire's coastline.

Council has so far:

- Adopted Stage 1 (Scoping Study) for the (Northern Shire) [Cape Byron to South Golden Beach CMP](#) (June 2020). Commenced Stage 2 studies identified in the Scoping Study to confirm current knowledge on key issues and concerns and to fill information gaps including a Coastal Hazard Assessment - review and update and planning for the Main Beach Shoreline Project.
- Adopted Stage 1 (Scoping Study) for the (Southern Shire) Cape Byron to Seven Mile Beach (including Ti-Tree and Tallow Lake, Belongil Creek and their catchments). Stage 2 studies identified in the Scoping Study are awaiting announcement of grant funding. These include a water pollution source tracking and control program for Tallow and Belongil Creek catchments; a review of the entrance opening strategy for the Tallow Creek and Belongil Creek estuaries; and an audit of Council's current coastal planning framework.

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- Not yet commenced a Stage 1 Scoping Study for the Brunswick River estuary, i.e. the remaining coastal area of the Shire. Preparation of a Scoping Study will be investigated in the 2022/23 FY.

5 Pending the outcome of the current studies, Council will consider whether to prepare a CMP for the entire coastal zone, or whether to prepare two or more CMPs. Byron Shire Council is one of 52 councils preparing CMPs for their coastal zones. In total, there are 50+ CMPs currently being prepared across the NSW coastline with **only three CMPs certified** to date (i.e. Stockton, Lake Illawarra and Lake Ainsworth).

10 For a small coastal council we have a large coastline with high coastal risks to manage. A CMP is necessary to effectively assess and prioritise risks and manage current and emerging issues under the NSW Coastal Management Framework and to allow access to the Coast and Estuary grant funding for implementation of key actions.

There are several key issues being encountered which are affecting councils in progressing their CMPs, predominantly on timing and insufficient guidance/information.

15 This report to Council provides an update on the coastal planning process, the status of the development of CMPs for the Byron Shire coastline and the key issues being encountered.

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RECOMMENDATION:

That the Coastal and ICOLL Advisory Committee members notes the legislated process and associated extended timeframes associated with preparing Coastal Management Program(s) under the NSW Coastal Management Framework.

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Coastal Planning in Byron Shire

Byron Shire has a long history of coastal planning due to its exposure to complex and dynamic coastal processes and the coastline's geological history. Due to Byron's location, particularly the position of Cape Byron as Australia's most easterly point and our north facing beaches, the processes such as erosion and recession are occurring at a significant rate.

Our coastline has endured a long history of large coastal storms and coastal erosion that have had a significant impact on our coastline. The 1970s was an intense, stormy period that resulted in the rapid landward movement of the shoreline at key locations and the loss of several houses to coastal erosion. After this intense stormy period a major comprehensive assessment in 1978 advocated the need for a coastal management plan to decrease the piecemeal and non-strategic attempts at protection works along the coastline.

In 1988 Council adopted the Byron LEP DCP which includes Part J that relates to development on coastal lands. This marked the beginning of Council's development control on coastal lands in accordance with a policy of relocation or 'planned retreat' as it is known locally.

Despite Council's coastal hazard management planning approach, no long-term coastal management plan has been approved or certified by the Minister, notwithstanding several attempts for the Shire including four attempts to be implemented by Council for the Byron Bay Embayment following the NSW Government's designation of Belongil Beach as a coastal erosion hotspot (i.e. where five or more houses and/or a public road are located in a current (or immediate) coastal hazard area, as identified in a coastal hazard study). The most recent attempt was Council's submission of a draft Coastal Zone Management Plan (CZMP) for the eastern precincts of the Byron Bay Embayment in 2018. Legal conflict has affected the coastal planning process and similarly, legislative change has rendered Councils coastal management planning process at that time redundant.

Following the commencement of the NSW Government's Coastal Management Framework in 2018, Council commenced preparation of Coastal Management Programs (CMPs) for its coastline under the legislated process including the *Coastal Management Act 2016*, *SEPP (Coastal Management) 2018* (now replaced by the *SEPP (Resilience and Hazards) 2021*) and the Coastal Management Manual (OEH, 2018).

Coastal Management Program Overview

Development of CMPs is partially funded by the NSW Department of Planning and Environment (DPE) (note recent name change from Department of Planning, Industry and Environment (DPIE)). CMPs set out the long-term strategy for the coordinated management of the coastal zone by council, public authorities, land managers and the community. CMPs will consolidate the funding and delivery of priority management actions to balance the environmental, cultural, recreational and economic needs of the coastal zone and to adapt to emerging issues such as population growth and climate change.

The development and implementation of a CMP is a staged process comprising five stages as per the figure below.

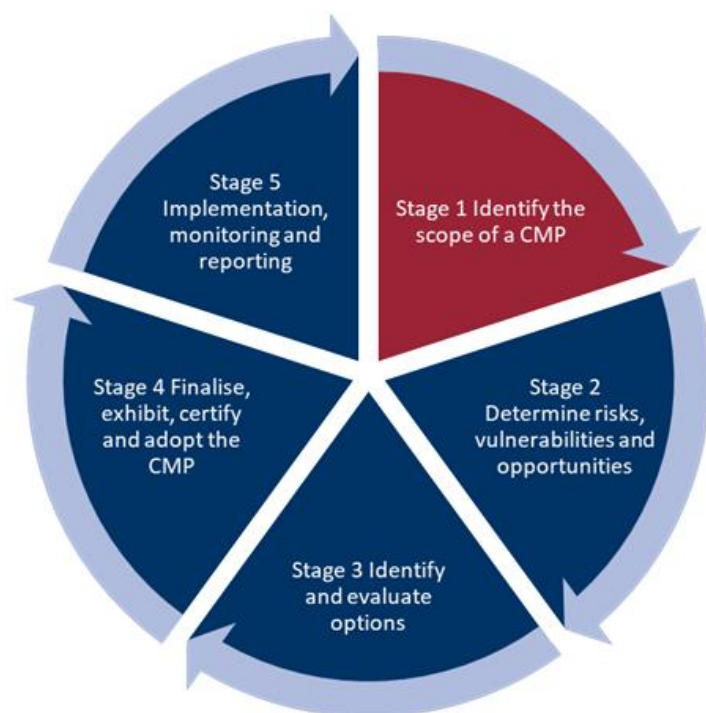


Figure 1: The stages of developing and implementing a Coastal Management Program

5 **Stage 1 Scoping Studies**

Stage 1 of the CMP process comprises a Scoping Study to:

- collate existing information on the study area;
- carry out stakeholder and community engagement;
- understand values and management issues;
- 10 • identify any information gaps; and
- outline studies required to be carried out to inform the later stages of the CMP development.

(Northern Shire) Cape Byron to South Golden Beach

15 Council has already adopted a Scoping Study for the (Northern Shire) open coast from Cape Byron to South Golden Beach (refer [Council webpage on project](#)) (June 2020).

The Scoping Study includes a Forward Plan outlining the proposed way forward for the next stages of CMP development, i.e. the recommended studies, investigation and assessments for Stages 2 to 4 as derived from work completed in Stage 1 (refer Section 6.5 of the Scoping Study).

(Southern Shire) Cape Byron to Seven Mile Beach including the Belongil Creek estuary

- 5 Council has also adopted a Scoping Study for the Southern Byron Shire coastline (refer [Council webpage](#)) ([August 2021](#)). The extent spans the coastal areas from Cape Byron to Seven Mile Beach (including Ti-Tree Lake, Tallow Lake, Belongil Creek and their catchments), and also encompasses the Belongil Creek Estuary and its catchment to the west of Cape Byron. The Forward Plan for the remaining stages of the CMP is provided at Section 9 of the Scoping Study.

Brunswick River Estuary

- 10 Council plans to prepare a Stage 1 Scoping Study for the Brunswick River estuary as a future priority. The planning of this process will commence in the 2022/23 FY pending funding and staff capacity.

Stage 2 Risks, Vulnerabilities and Opportunities

- 15 Stage 2 of the CMP process involves additional technical studies to confirm current knowledge on key issues and concerns and to fill information gaps that are critical to the development of management strategies and actions in Stage 3. These technical studies are co-funded by the State Government on a 2:1 funding basis through the Coast and Estuary Grants Program. The status of projects identified in either Scoping Study as high priority are listed in the table below.

- 20 Table 1: Stage 2 High Priority Projects Planned and Underway

Project Name	Description	Status/ Expected Completion
Main Beach Shoreline Project	Recommended in the Scoping Study for Cape Byron to South Golden Beach is the continuation of a design investigation for the modification of the coastal protection works at Main Beach, Byron Bay.	Preliminary options analysis completed. Detailed technical investigation almost complete with a report expected to be completed by end of May 2022. The identification and evaluation of the preferred design option will be undertaken during Stage 3 of CMP preparation.

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Project Name	Description	Status/ Expected Completion
Coastal Hazard Assessment Review and Update	<p>A detailed review of Council's most recent Coastline Hazard Assessment Update (BMT, 2013) incorporating a further eight years of data was recommended in the Scoping Study for the Northern Coastline (Cape Byron to South Golden Beach) as a high priority across the entire coastal zone of the Byron LGA.</p> <p>The intention is to retain and build upon the 'fit for purpose' components of the 2013 study as an opportunity to use this existing work (i.e. cost savings) and to fast-track elements of the study.</p> <p>The Coastal Hazard Assessment for the entire Byron Shire coastal zone will look at the hazard from beach erosion and recession, coastal and tidal inundation, dune and cliff stability, and entrance instability. A detailed risk assessment is also undertaken during Stage 2 to analyse and evaluate current and future risks to coastal values.</p>	Underway. Expected for completion by end of June 2022.
Water Quality Source Tracking and Control Program for Belongil Creek and Tallow Creek	<p>Water pollution of the Tallow Creek and Belongil Creek estuaries from a variety of sources was identified as a key threat to coastal values as identified in the Scoping Study for the southern Byron Shire coastline.</p> <p>This project will further identify risks associated with water pollution from urban stormwater, treated effluent discharge, agricultural diffuse source runoff and pollution to the estuarine environment from litter, solid waste, marine debris and microplastics, and will identify opportunities for improving water quality in these estuaries for further consideration at Stage 3.</p>	Awaiting announcement of grant funding.

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Project Name	Description	Status/ Expected Completion
Identifying risks to cultural and ecological values and low-lying assets in Tallow Creek and Belongil Creek ICOLLs associated with entrance opening strategies	<p>This project collated several recommendations made in the Scoping Study for the southern Byron Shire coastline and will include:</p> <ul style="list-style-type: none"> • engagement with Arakwal cultural representatives to identify cultural understandings of estuary dynamics/processes and cultural management focusing on Tallow Creek • literature review i.e. of best management practice for these type of estuarine systems • an assessment of nuisance flooding when entrances are closed • identification of opportunities to improve the existing entrance opening decision support frameworks for Tallow and Belongil creeks • drafting and finalisation of a new entrance opening strategy for Tallow Creek • preparation of a report identifying recommended amendments to the Belongil Creek entrance opening strategy at the two-year future review • stakeholder and community engagement. 	Awaiting announcement of grant funding
Identifying barriers and opportunities for improvement associated with Council's coastal planning controls and processes	<p>This project collated several recommendations made in the Scoping Study for the southern Byron Shire coastline and will include:</p> <ul style="list-style-type: none"> • consideration of mapping and inclusion of a Coastal Vulnerability Area into the planning scheme 	Awaiting announcement of grant funding

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Project Name	Description	Status/ Expected Completion
	<ul style="list-style-type: none"> reviewing discrepancies between Council and State Government mapping of coastal wetlands and littoral rainforest areas and mapping any amendments required to Council's mapping or to the State Environmental Planning Policy (Coastal Management) 2018 preliminary mapping of known and predictive cultural heritage and values in the coastal zone of the Shire including significant consultation with Aboriginal cultural representatives provision of advice on pathways for Council to transition into a more current and streamlined planning framework (such as recommended mapping and amendments and justification for changes) whilst retaining or improving on the level of protection offered by existing controls. 	
<p>Evidence based research of the impacts of recreational and tourism use on coastal habitats and wildlife*</p> <p><i>* Identified as a medium priority study in CMP Scoping Studies.</i></p>	<p>This study was recently awarded funding through the DPE's Biodiversity Conservation Division which aims to review current scientific research to provide evidence-based information on the effects of recreational uses on wildlife and habitats in the coastal area, and to investigate novel solutions to manage impacts sympathetically (in alignment with the <i>Biodiversity Conservation Act 2016</i> and <i>Marine Estate Management Act 2014</i> objectives). The outcomes of this study will support ongoing development of the CMPs, including the development and delivery of access and other facilities within the coastal zone and development of a policies and/or plans. This study is anticipated to commence July 2022 and be completed within 12 months.</p>	<p>Consultant being engaged. Project to commence in June 2022.</p>

Other Stage 2 studies

Several medium and low priority studies were also recommended in each Scoping Study which are deemed less essential to the development of the CMP and pending funding availability. These low priority studies may be undertaken as actions during implementation of the CMPs (Stage 5) rather than during Stage 2, unless funding opportunities or resources become available sooner.

The status on development of CMPs for the Byron Shire coastline is outlined in figure 1 below.

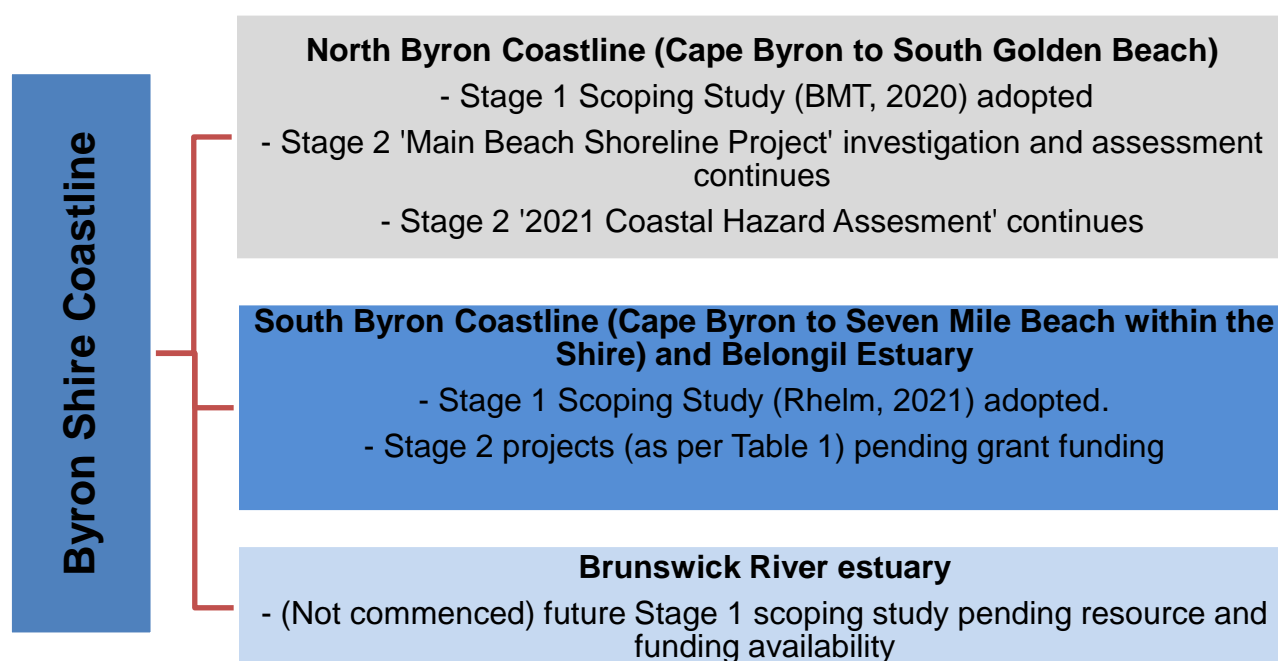


Figure 2: Byron Shire Council's status on developing CMPs

Further stages of CMP Development

The subsequent stages in the process are:

- Stage 2 – (continues) Undertaking of further Stage 2 investigations and assessments;
- Stage 3 – Identify and evaluate options (through risk assessment and cost, benefit analysis);
- Stage 4 – Prepare, exhibit, finalise, certify and adopt a CMP (leading to implementation); and
- Stage 5 – Implement, monitor, evaluate and report.

Stage 3 of the CMP process requires Council to identify and evaluate possible management options in order to select preferred coastal management actions to address the issues identified as affecting the CMP study area. The aim of Stage 3 is to develop strategies and actions that reduce exposure to coastal hazards, address coastal management issues and take advantage of opportunities, including consideration of management actions prepared under previous CZMPs

Stage 4 of the CMP process involves a draft CMP being prepared, exhibited and then submitted to the Minister for certification. Once the CMP is certified by the Minister, Council must publish it in the Gazette. The CMP takes effect on the date on which it is published in the Gazette (or on a later date if specified in the CMP). A CMP must be certified to access funding for implementation under the Coast and Estuary Grants program.

CMP progress and issues

According to recent information provided by the Department of Planning and Environment, there are 50+ CMPs being prepared (NSW-wide), with **only three CMPs certified** (Stockton, Lake Illawarra and Lake Ainsworth) thus far. The number of councils involved in preparing a CMP (or CMPs) is 52 covering three distinct geographic scopes – Open Ocean Coast, Estuary, or a combination of Open Coast and Estuary. Some councils have decided to prepare several separate CMPs for their estuaries and coasts; others have sought to combine estuary and coasts into a single CMP.

The coastal zone of Byron Shire comprises three estuaries bounded by 262 km² of coastal catchments as well as 35 km of open coast. The beaches, headlands, estuaries and catchments have significantly varying environmental, geomorphic and hydrological processes and a complex array of management issues.

Pending the outcome of the current studies, Council will consider whether to prepare a CMP for the entire coastal zone, or whether to prepare two or more CMPs. For example there may be an Open Coast CMP and an Estuary CMP.

Key issues being encountered during implementation of the Coastal Management Framework and development of CMPs for Byron Shire centres predominantly on timing and insufficient guidance/information.

Issues being encountered include:

- Lack of guidance to local councils - information is needed on how to include broader catchment issues and effectively integrate catchment, coast and marine policy and governance.
- Insufficient technical guidance either in the Manual or Toolkit – further technical guidance is needed on coastal hazard and risk assessment to ensure a consistent approach.
- Improved guidance on the preparation of coastal management area maps, specifically for a Coastal Vulnerability Area.

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- Insufficient ongoing funding to coastal management within Council (both planning and reactive).
- Ensuring government agencies have a good understanding of their role in the process.
- 5 • Lack of appropriate agency staff resourcing to reflect their involvement.
- Insufficient project budgets to include engagement fees to allow adequate and meaningful engagement and collaboration with cultural representatives from relevant Aboriginal organisations.
- 10 • Communication and collaboration; higher level communication needs to be undertaken between state, local government, and agencies (i.e. Director/CEO Working Groups).
- Timing; progression through the stages of CMP development is taking a lot longer than originally anticipated. Staff thoughts are that technical studies (such as coastal hazard assessments) would be better rolled out by the state government (in collaboration with Council) to ensure consistency in studies that cross LGA boundaries.
- 15 • Timing; grant funding applications are taking > 4months to be approved. This delay in the approval of funding directly affects project timeframes and delivery of the stages of the CMP process.
- 20 • Engagement fatigue and lack of faith in authorities ability to develop a certifiable plan and/or resolve coastal issues.

Steps being taken to resolve some of the issues being experienced include:

- Coordination of a regular forum for council staff to discuss CMP preparation with other local council practitioners and DPE staff. The first 'North-East CMP Roundtable' was held on Wednesday 18 May 2022. Other state agencies will be invited to the meetings on a need's basis. It was clear at the first meeting that other councils are experiencing similar issues.
- 25 • Staff meeting with the NSW Coastal Council on the afternoon of Monday 30 May 2022 prior to the NSW Coastal Conference. The meeting was an informal opportunity for staff of northern councils to meet the NSW Coastal Council Members and tell provide feedback on what's working (or not) with the NSW Coastal Management Framework and where it needs to be improved.
- 30 • Letter sent to the new Minister for Local Government, the Hon. Wendy Margaret Tuckerman MP who is responsible for the coastal portfolio focussing on the funding issues.
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Next steps

- Staff and project consultants will continue to progress the development of CMPs for the Byron Shire Coastline and related projects.
- 5 • A Stakeholder Workshop for the Coastal Hazard Study is expected to be held in July 2022 which committee members will be invited to participate.
- The next update on the status of projects and CMP preparation will be reported to the next Coastal and ICOLL Advisory Committee meeting (September 2022).

Strategic Considerations

Community Strategic Plan and Operational Plan

CSP Objective	L2	CSP Strategy	L3	DP Action	L4	OP Activity
Community Objective 3: We protect and enhance our natural environment	3.3	Partner to protect and enhance the health of the Shire's coastlines, estuaries, waterways and catchments	3.3.1	Implement Coastal Management Program	3.3.1.1	Continue preparing a Coastal Management Program (CMP) in accordance with the staged process for Cape Byron to Sth Golden Beach
Community Objective 3: We protect and enhance our natural environment	3.3	Partner to protect and enhance the health of the Shire's coastlines, estuaries, waterways and catchments	3.3.1	Implement Coastal Management Program	3.3.1.4	Commence a Coastal Management Program (CMP) in accordance with the staged process for Cape Byron Southern Coastline (including Tallow and Belongil Creek Catchment)

Legal/Statutory/Policy Considerations

- 5 *Coastal Management Act (2016), SEPP (Resilience and Hazards) 2021 (which replaces the SEPP (Coastal Management) 2018), Coastal Manual and associated Toolkit provided by the NSW State Government.*

Financial Considerations

An existing budget is allocated to the development of Coastal Management Programs for Stage 2 studies. Additional budget has been requested in the FY2022/23 budget to continue the development of CMPs.

5 Consultation and Engagement

The next update on the status of projects and CMP preparation will be reported to Council's newly formed Coastal and ICOLL Advisory Committee (20 October 2022 meeting).

10 Stakeholder and community engagement for the development of CMPs is ongoing and has comprised:

- Council website updates;
- social media messaging;
- community surveys;
- 15 • a series of stakeholder workshops on coastal zone values, management issues and risks; and
- face-to-face engagement at farmers markets and drop-in sessions during the process of Scoping study preparation or period for public comment.

Report No. 3.2 De-Brief on the 29th Annual NSW Coastal Conference

Directorate: Sustainable Environment and Economy

Report Author: Chloe Dowsett, Biodiversity and Sustainability Coordinator

5 **File No:** I2022/286

Summary:

The 29th NSW Coastal Conference co-hosted by Byron Shire and Tweed Shire Councils was held at Mantra on Salt Beach, Kingscliff from 31 May – 2 June 2022.

10 The conference is a three-day event which comprises of plenary sessions, concurrent sessions, panel discussions, workshops, field trips (addressing some of the local coastal, estuary and marine management issues), networking events and the Annual NSW Coastal Management Awards. The theme of the conference was 'Living with Uncertainty'.

15 A pre-conference workshop on Monday 30 May was facilitated by the Department of Planning and Environment on 'NSW Coastal lakes and lagoons: management and conservation in a changing climate'.

This report to the Coast and ICOLL Advisory Committee provides a de-brief on the Conference.

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RECOMMENDATION:

That the Coast and ICOLL Advisory Committee notes a de-brief on the Conference.

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Report

The 29th NSW Coastal Conference co-hosted by Byron Shire and Tweed Shire Councils was held at Mantra on Salt Beach, Kingscliff from 31 May – 2 June 2022. The three-day event comprised of plenary sessions, concurrent sessions, panel discussions, workshops, field trips (addressing some of the local coastal, estuary and marine management issues), networking events and the Annual NSW Coastal Management Awards. The theme of the conference was 'Living with Uncertainty'.

A pre-conference workshop on Monday 30 May was facilitated by the Department of Planning and Environment on 'NSW Coastal lakes and lagoons: management and conservation in a changing climate'.

The NSW Coastal Conference has grown to become one of the most successful coastal industry events held in Australia. The conference brings together over 250 delegates from a diverse range of fields, including: all aspects of coastal, estuarine and marine management, science and research, and education, planning, policy and law; and includes representatives from government, the private sector, academia, community groups and the interested public.

Past conferences have been held in Terrigal (2019), Merimbula (2018), Port Stephens (2017), Coffs Harbour (2016), Forster (2015), Shoalhaven (2014), Port Macquarie (2013), Kiama (2012), Tweed (2011), Batemans Bay (2010), Ballina (2009), Wollongong (2008), Yamba (2007), Coffs Harbour (2006) and Narooma (2005).

Opening of Conference

The conference was opened with a Welcome to Country from Aunty Dale - a local Goodjinburra Elder from Fingal, and Ernie - a local Goodjinburra man from Fingal. Mayor's Michael Lyon and Chris Cherry then provided a warm welcome to all attendees followed by the Hon. Wendy Tuckerman, Minister for Local Government and Member for Goulburn. Minister Tuckerman has a number of responsibilities including Coastal Management and functions under the *Coastal Management Act 2016* including the certification of Coastal Management Programs and delivery of the State Government's Coast and Estuary Grants Program.



Photo 1: Opening by Mayor Michael Lyon (Byron Shire Council)



Photo 2: Welcome to Country by Ernie (Goodjinburra Elder from Fingal)



Photo 3: Address by the Hon. Wendy Tuckerman (Minster for Local Government)



Photo 4: Attendees - Dylan Laicher (presenter); Cr Cate Coorey (BSC Councillor and presenter); Nathan Galluzzo (presenter); Orla Seccull (BSC staff and presenter); Norm Graham (NPWS staff and presenter).

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Photo 5: Council staff attendees: Sharyn French (Manager EEP); Chloe Dowsett (Coast and Biodiversity Coordinator); Gray Blunden (Development Engineer); Tim Connors (Team Leader Environmental Health)

Key-Note Speakers

5 Associate Professor Will Glamore, Water Research Centre, UNSW Sydney

Will Glamore is the leader of the EcoEng Research Group and Deputy Director at the Water Research Laboratory, UNSW Sydney. Dr Glamore is currently the Chairman of PIANC ANZ, the Chair of the Tuggerah Lakes Expert Panel, and a former member of the NSW Coastal Council, the Marine Estate Expert Knowledge Panel, and the PFAS Independent Expert Panel. Dr Gilmore spoke about his past 25+ years leading research programs on estuaries and ecosystem response modelling and climate change, as well as the restoration of blue carbon habitats. His recent work focusses on 'Blue Carbon' and work with the Clean Energy Regulator to develop the 2022 Blue Carbon Method under the Emissions Reduction Fund for the removal/modification of tidal restrictions to coastal wetlands. Blue Carbon is scaling up fast and there is a competitive market for the product which will create positive financial incentives for companies to invest in the restoration and rehabilitation of ecosystems. The premise is based on creating a market (environmental-economic pathway) and system for companies and corporations to invest in green projects. However, at this point in time the regulatory framework is yet to be created and pathways for managing the projects or sites into the future needs to be formalised.

Dr Pierre Wiart, Head of Climate and Risk Management, CoreLogic International

Pierre is a senior global risk transfer director with two decades' experience in all aspects of risk transactions including (re)insurance underwriting, enterprise risk management, portfolio, structured risks and fund management. Pierre leads CoreLogic's climate and risk management team in Australia and New Zealand with a focus on climate risk strategy execution and risk management solutions for the insurance, banking and government sectors. With 10% of Australia's property market located on the coast, Pierre presented on the work he has completed on coastal risk to the property market, i.e. what could be impacted by coastal hazards and what is the value of the property at risk. Coastal and/or natural hazard risk appears to be a new concept to the banking industry as it is generally only considered or diverged to the insurance industry. Pierre's work in this space allows discussion to commence between the finance sector and the community/property owners. Pierre's coastal risk analysis and methodology did raise a few eyebrows from others working in this space, in relation to the accuracy of the data used in the analysis. However, his work outlines that consultation between government and the private sector needs to be strengthened to improve the robustness of the analysis/assessment of risk being undertaken.

Dr Justine Bell-James, Associate Professor and Director of Higher Degree Research, The University of Queensland

Justine Bell-James is an Associate Professor at the TC Beirne School of Law with expertise in environmental and climate change law and climate change litigation. She holds a PhD from QUT (2010) and was a postdoctoral research fellow at UQ's Global Change Institute from 2011-2013. Justine's research focuses on legal mechanisms for protection of the coast under climate change, incorporating both human settlements and coastal ecosystems. She currently leads an ARC Discovery Project (2019-2022) considering how coastal wetland ecosystem services can be integrated into legal frameworks.

Justine is also an expert on legal mechanisms to facilitate blue carbon projects in Australia and internationally, and she was involved with the development of a Blue Carbon methodology under Australia's Emissions Reduction Fund. Justine spoke about the legislative and policy barriers to Blue Carbon projects, including: tenure issues in the intertidal zone (i.e. interface between private and public land); no dedicated 'fit for purpose' policy framework for Blue Carbon restoration projects (DA's focus on impacts rather than benefits); and restoration in the coastal space being difficult and costly. Justine advocates for a 'rolling easement' approach where shorelines can be protected as they migrate inland. She outlines that this approach is legally enforceable, however lots of discussion has been held with no implementation to date. With the uncertainty of sea level rise in the future, any approach needs to be flexible and adaptable and a rolling easement style of covenant on land would allow land to continue to be used up to a certain point (i.e. land or land-use is not sterilised unnecessarily).

Sabyah White, student, climate activist and resident of the Northern Rivers

Sabyah is 14 years old, a climate activist and the subject of an environmental documentary called [Girls For Future](#). The documentary follows four girls from very different countries around the world who will be impacted in completely different ways by climate change. Originally from Airlie Beach, in just fourteen years Sabyah has lived through a

number of natural hazard events and is extremely concerned about significant sites such as the Great Barrier Reef and the impact of warming oceans on the health of the reef. The film went global and was even viewed at COP 26.

- 5 Sabyah's speech was mesmerising, confronting and moving, bringing a few tears to some in the audience. Seeing the reality of climate change through the eyes of a child born into and living with the impacts of a changing climate was sobering and highlighted the sense of urgency required for action. For someone so young, Sabyah spoke so eloquently and captured the whole audience - she is truly inspirational.

Presentations & Field Trips

- 10 The Conference Program covered a number of coastal issues regarding coastal management. The three main streams were:
- Holistic Coastal Management
 - Knowledge, Science and Uncertainty
 - Empowering People
- 15 Presenters included Local and State Government staff, consultants, academics, local community organisations, Indigenous community members and students. Presentations covered a range of topics, projects and issues NSW-wide focussing on the open coast, ICOLLs, estuaries and catchments.

Four field trips were offered:

- 20
- Kingscliff Coastal Management and Tweed Sand Bypassing
 - Tweed River Cruise
 - Bundjalung Cultural Tour
 - Byron Bay Beach Walk

Coastal Management Awards

- 25 The Annual NSW Coastal Management Awards are presented to publicly recognise and acknowledge the contributions of individuals, groups, organisations and agencies toward the ecologically sustainable management of the NSW coastal zone. The Awards were presented on the evening of Wednesday 1st June 2022 at the NSW Coastal Conference Dinner. Two local community Dune Care groups received Awards for their outstanding
- 30 work and long-term commitment to the coastal environment:

- Local Hero Award – Helen Brown, Suffolk Park Dune Care
- Community Involvement – Green and Clean Dune Care, Clarkes Beach

It was wonderful to recognise and pay tribute to the great work that volunteers do in Byron Shire to improve coastal dunes, dedicating many years of their life and free-time.

Take Home Messages

Key take home messages from staff that attended the Conference include:

- 5
 - We need to continue to meaningfully engage with our Aboriginal communities to share what we have learned and remember what we have forgotten (Uncle Ernie).
 - Local and State Government need to work better together as partners developing Coastal Management Programs (CMPs).
 - The CMP framework needs to better include catchments and estuaries.
- 10
 - There is significant scope for Blue Carbon projects to provide a positive incentive for change in land management. Public land managers should be mindful of opportunities to acquire “whole hydrological units” to ease future implementation of such projects.
- 15
 - The issue of private and public property rights and boundaries needs to be resolved and defined noting that there are varying view-points around this presently.
 - Better guidance in relation to the management of ICOLLs and entrances is needed.
 - Several new tools are available that could assist in Council better understanding change in the coastal environment (e.g. using remote sensing).
 - Sharing of information between various parties could be improved.

20 Conference 2023

The next NSW Coastal Conference will be the 30th conference and will be combined with the Australian Coastal Society ‘Coast to Coast’ Conference. The date of this combined event is not yet known, however it will be hosted by Newcastle City Council.

Strategic Considerations

25 Community Strategic Plan and Operational Plan

CSP Objective	CSP Strategy	DP Action	Code	OP Activity
Community Objective 3: We protect and enhance our natural environment	3.2: Strive to become a sustainable community	3.2.2: Support community environmental and sustainability projects	3.2.2.8	Co-host the 29th NSW Coastal Conference with Tweed Shire Council (May 2022)

Report No. 3.3 Main and Clarkes Beach Dune Recovery Project

Directorate: Sustainable Environment and Economy

Report Author: Chloe Dowsett, Biodiversity and Sustainability Coordinator

5 **File No:** I2022/426

Summary:

Council has been successful in obtaining State Government funding from the Coastal and Estuary Grants Program – Implementation Stream for the **‘Byron Bay - Main and Clarkes Beach Dune Recovery Project’**.

10 The aims of the project are to:

- rehabilitate and restore the dune system to its pre-storm form and function;
 - rehabilitate and restore the dune ecosystem and habitat;
 - increase sand volumes stored within the dune to re-establish the coast’s natural defence mechanism; and
- 15 • improve the public’s beach safety, access and amenity.

The project will involve 'beach scraping and dune reprofiling' which involves moving (via mechanic means) small to medium quantities of sand harvested from the swash zone and lower part beach to the back of the beach to reinstate the incipient dune.

Staff will provide a brief powerpoint presentation to the Committee members.

20

RECOMMENDATION:

25 **That the Coastal and ICOLL Advisory Committee notes the presentation on the ‘Main and Clarkes Beach Dune Recovery Project’.**

Attachments:

30 1 ENGAGEMENT - Main and Clarkes Beach Dune Recovery Project - for Coastal and ICOLL Advisory Committee - 30 June 2022, E2022/38590 , page 30 [↓](#)

Report

Main and Clarke's Beach dunes have experienced significant erosion and recession removing the front face, large volumes of sand and the majority of dune vegetation.

- 5 An application was submitted to the State Government Coastal and Estuary Grants Program – Implementation Stream on the 17 August 2021 for the **Main and Clarkes Beach Dune Recovery Project**. Council was subsequently advised that the application to the program has been successful, subject to Council meeting the balance of funds for the project and agreeing to the funding terms.

- 10 This project aims to restore the sand dune ecosystems of Main and Clarkes Beach using the methods and 'soft stabilisation' techniques described in the 'Coastal Dune Management Manual' (DPIE, 2001).

The aims of the project are to:

- rehabilitate and restore the dune system to its pre-storm form and function;
- 15 • restore/rehabilitate the dune ecosystem and habitat;
- increase sand volumes stored within the dune to re-establish the coast's natural defence mechanism; and
- improve the public's beach safety, access and amenity.

The expected outcomes are:

- 20
- increase in sand volumes and coastal hazard risk reduction
 - restoration/rehabilitation of dune ecosystems and habitat
 - restoration of public beach access ways
 - improved beach amenity
 - 25 - improved benefit for the Byron Bay community

The project will involve 'beach scraping and dune reprofiling' which involves moving (via mechanic means) small to medium quantities of sand harvested from the swash zone and lower part beach to the back of the beach to reinstate the incipient dune.

- 30 Council has undertaken beach scraping programs at New Brighton Beach on three formal occasions. Scraping works have been deemed a success, with the 2017 sand volumes still in situ and almost completely covered in vegetation.

Staff will provide a brief presentation to the Committee members.

Strategic Considerations

Community Strategic Plan and Operational Plan

CSP Objective	CSP Strategy	DP Action	Code	OP Activity
Community Objective 3: We protect and enhance our natural environment	3.3: Partner to protect and enhance the health of the Shire's coastlines, estuaries, waterways and catchments	3.3.1: Implement Coastal Management Program	3.3.1.9	Clarkes / Main Beach dune stabilisation project

Recent Resolutions

- 5 • 20-525
- 20-618

Legal/Statutory/Policy Considerations

The Coastal Management Act 2016 and associated policies.

Financial Considerations

- 10 The total project cost is \$164,000 (50% funding amount is \$82,000). Budget has been identified from available funds within the Crown Pay Parking reserve.

Consultation and Engagement

A COMS Plan has been developed for the project to:

- Increase awareness of the project/situation
- 15 • Provide information for community on our website
- Provide a mechanism for gaining feedback and input into the project from Key Stakeholders and Agencies



Main and Clarkes Beach - Dune Recovery Project Byron Shire NSW



Clarkes Beach looking west, during December 2020 event.

Coastal erosion is a challenging issue for Byron Shire.

After period of relative calm, since 2016, rapidly increasing from mid 2019 Clarkes and Main beaches have experienced significant beach erosion causing:

- loss of frontal dune and subaerial beach;
- loss of coastal vegetation;
- closure of many beach access ways;
- impacts to beach amenity;
- stability risk to several built assets.



What is beach scraping (otherwise known as 'sand harvesting' or 'NABE')?



- Beach 'scraping' or 'reprofiling' or 'sand harvesting' is a proven low risk, cost-effective management strategy for rebuilding dunes and/or restoring sub-aerial beach profiles.
- The more descriptive term for the methodology is "Sand Harvesting " or "Nature Assisted Beach Enhancement".
- Beach and dune reprofiling accelerates the natural coastal process of returning sand to the subaerial beach and foredunes.
- By moving small amounts of sand from the intertidal zone and placing it above the wave run-up limit, accretion of the lower beach is accelerated because a flatter profile exists.
- Beach reprofiling does not introduce new sand to the littoral system; instead redistributes sand within the active system speeding up beach and dune rebuilding (volume and height).



New Brighton –
beach scraping
works, October
2017.





Main and Clarkes Beach - Dune Recovery Project Byron Shire NSW



*Clarkes Beach
looking west, early
2021*

Aims of the project are to:

- increase sand volumes stored within the dune to re-establish the coast's natural defence
- restore/rehabilitate the pre-storm dune ecosystem and habitat
- improve public beach, safety, access and amenity.



Project Proposal

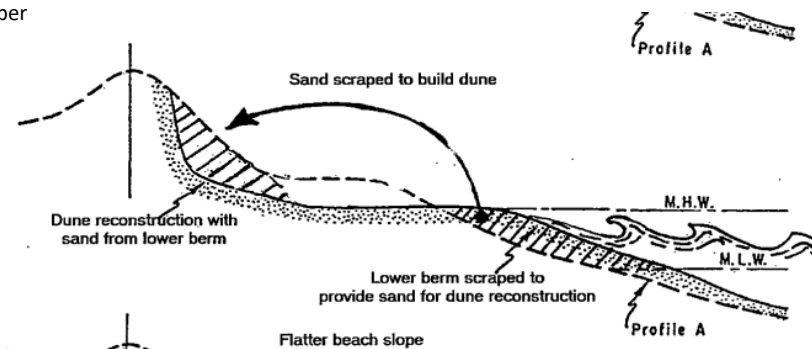


- The project site/sand harvest zone is approximately 750m between the Byron Beach Café and the Main Beach SLSC.
- Sand harvesting is intended to be undertaken over 2–4-week period between May and June 2022*
- The intertidal zone is harvested to a depth of approximately 30cm (± 10 cm) to win around 12m³/m of sand.
- The excavated beach sand will be moved by machinery up the beach profile and placed on the frontal dune.
- Technical advice will be provided to operators regarding harvest depth and sand placement technique prior to commencement of works.
- Dune revegetation and fencing will be implemented upon completion of the beach reprofiling works

**Timing only an estimate at this stage - pending all approvals and contracts signed. Works should be completed prior to September (bird and turtle season).*



New Brighton –
beach scraping
works, October
2017.





Beach Access Restoration



- After the 2020 event, 9 of the 14 access paths were closed due to safety issues.
- Erosion exposed a number of historical beach access way works constructed out of geotextile sand bags (geobag).
- As conditions have stabilised access paths have been reprofiled where possible to allow safe pedestrian access.
- Council prepared a 'Beach Access Restoration Plan' which outlines which accessways are to be retained (and restored) and which accessways are to be decommissioned.
- Decommission and restoration of beach access ways will be completed prior to and after the beach scraping works respectively over the length of the work site.
- **Presently all 4 accessways that remain closed are to be decommissioned permanently.**



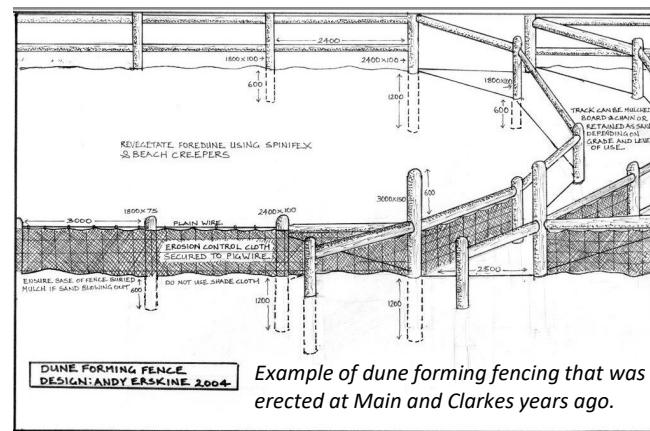


Dune and Public Access Fencing



- Unrestrained pedestrian traffic has the capacity to significantly damage and erode the restored dune system.
- It is recommended that the dune system running the length of Clarkes and Main Beach between the Beach Café and SLSC is fully fenced to discourage pedestrian access.
- The aim is to create a dune restoration area to preserve the mature and existing vegetation and the newly planted/revegetated areas.
- Fencing on either side of access ways will be used to control and direct pedestrian traffic onto the lower beach.
- The alignment of seaward fencing will be determined after the beach reprofiling works are complete.

New Brighton – newly scraped dune and seaward fencing running the full length of works area.



New Brighton – seaward fencing erected slightly up the frontal dune.





New Brighton – newly planted Beach Bean and Spinifex ground covers.

Dune Rehabilitation and Planting



- As part of the project a Dune Revegetation Plan will be prepared with the objectives of stabilising the dune against wind erosion, controlling pedestrian access, retaining natural sand volumes, and providing habitat for flora and fauna.
- Once, fully fenced the dune restoration area will be revegetated through an intensive program of planting/seeding and cuttings of native mid-dune and frontal dune species, focussing on ground covers such Goats Foot, Pigface, Spinifex, Beach Bean and Yellow Beach Bean to stabilise the dune.
- The Contractor will work closely with the existing local Clean and Green Dune Care Group to prepare the Plan, coordinate revegetation program and deliver a Community Planting Day.

Example – model frontal dune vegetation





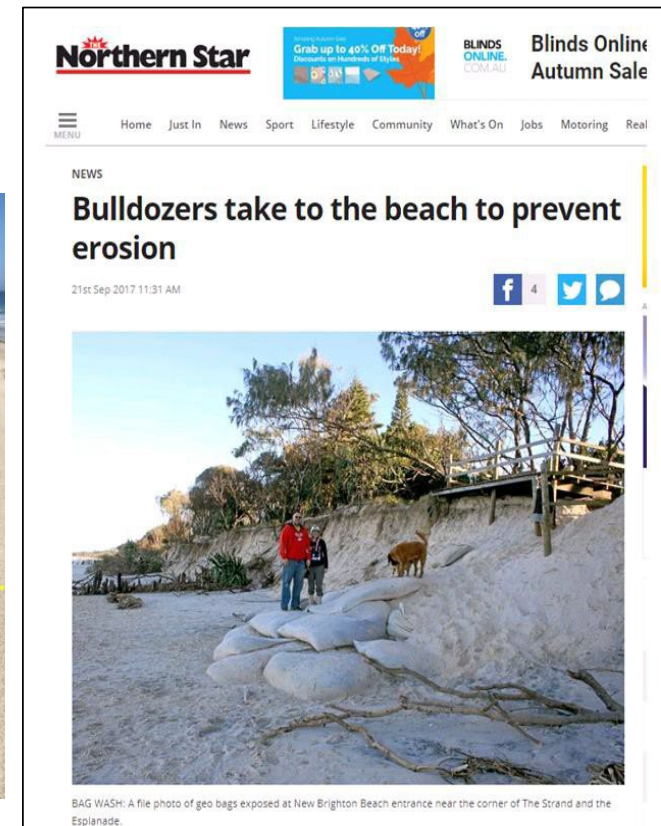
Community consultation



Community and stakeholder engagement and regular consultation is critical to project success.

The project team will prepare a Community and Stakeholder Engagement Plan for the project.

A variety of engagement methods will be undertaken to inform and educate in an attempt to mitigate any negative views before they arise (as experienced during the 2017 program at New Brighton Beach).





Report No. 3.4 Review Constitution of Coastal and ICOLL Advisory Committee

Directorate: Sustainable Environment and Economy

Report Author: Michelle Chapman, Project Support Officer

5 **File No:** I2022/682

Summary:

Attached is the draft Constitution for the Coastal and ICOLL Advisory Committee, for the Committee's review and recommendation for adoption.

10

RECOMMENDATION:

That the Coastal and ICOLL Advisory Committee recommends to Council to adopt the constitution at Attachment 1 (E2022/11708) with the following amendment to 'Membership':

15 **Membership is to include:**

- 2 Councillors
- 6 relevantly qualified community representatives

Representatives from:

- Department of Planning and Environment
- 20 • DPI Fisheries - Cape Byron Marine Park
- National Parks and Wildlife Service
- Crown Lands
- State Emergency Services
- Transport for NSW
- 25 • Bundjalung of Byron Bay Aboriginal Corporation (Arakwal)
- Jali Local Aboriginal Land Council
- Tweed Byron Local Aboriginal Land Council
- Byron Shire Council General Manager (or staff member delegate)

30 ***Note: Staff members and non-community representatives participating on the Committee do not have any voting entitlements.***

Attachments:

1 DRAFT Coastal and ICOLL Advisory Committee Constitution 2022, E2022/11708 , page 41 [↓](#)

35

Report

The constitution is attached for the Committee's review and endorsement, following Res 22-026 that appointed 2 Councillors, Cr Dey and Cr Coorey – Alternate Cr Ndiaye.

- 5 Resolution 22-098 appointed six community representatives to the Committee, two of whom have since resigned. Nominations for replacements close 30 June 2022.

It is recommended, for this Committee, that the number of Councillors required for a quorum be amended from two to one. The wording at Point 7 has changed to:

"A quorum is to constitute at least half the number of members plus one (resulting half numbers go down), one of which is to be a Councillor."

- 10 For the Committee's noting, the next meeting is scheduled for 20 October at 11.30am.

Strategic Considerations

Community Strategic Plan and Operational Plan

CSP Objective	CSP Strategy	DP Action	Code	OP Activity
Community Objective 5: We have community led decision making which is open and inclusive	5.2: Create a culture of trust with the community by being open, genuine and transparent	5.2.4: Support Councillors to carry out their civic duties	5.2.4.5	Implement and manage Code of Conduct training programs for Councillors, staff, and committee members

Recent Resolutions

- 22-026, 22-098

15 Legal/Statutory/Policy Considerations

Not applicable.

Financial Considerations

Not applicable.

Consultation and Engagement

- 20 Not applicable.



BYRON SHIRE COUNCIL

**COASTAL AND ICOLL ADVISORY
COMMITTEE**

DRAFT CONSTITUTION

INFORMATION ABOUT THIS DOCUMENT

(INTERNAL USE ONLY)

Date Adopted by Council	TBC	Resolution No.	TBC
Responsibility	Department of Sustainable Environment and Economy		
Review Timeframe	Term of Council		
Last Review Date:	February 2022	Next Scheduled Review Date	December 2024

Document History

Doc No.	Date Amended	Details Comments eg Resolution No.
E2022/11708	June 2022	Draft Constitution for review by Committee, for adoption.

Further Document Information and Relationships

Related Legislation	Section 355, Local Government Act (1993)
Related Policies	Code of Conduct 2016 Work Health Safety Policy Code of Meeting Practice
Related Procedures/ Protocols, Statements, documents	

Constitution: Coastal and ICOLL Advisory Committee

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Constitution: Coastal and ICOLL Advisory Committee

1. Preamble

The Coastal and ICOLL* Advisory Committee is a Committee of the Council and does not have executive power or authority to implement actions.

The role of the Committee is to report to Council and provide appropriate advice and recommendations to Council on matters relevant to this Constitution.

*ICOLL is an acronym for Intermittently Closed and Open Lake or Lagoon. The Shire has three ICOLLs being Tallow Creek, Belongil Creek and Ti-Tree Lake. Noting that Council is responsible (under the Licences of State Agencies) for the management of Tallow and Belongil only.

2. Purpose

The purpose of the Coastal and ICOLL Advisory Committee is to:

- a) Assist Council in the development of Coastal Management Programs for the Shire's coast, estuary and ICOLLs.
- b) Provide input and feedback on existing projects, plans and strategies related to the coast and estuaries/ICOLLs.
- c) Offer a platform and conduit for communication between stakeholders and community members and agencies.

3. Timeframe for Committee

The lifespan of the Coastal and ICOLL Advisory Committee is for the term of Council 2022 to 2024.

4. Responsible Directorate

This Committee is administered by the Sustainable Environment and Economy Directorate. The Director or their delegate will attend these meetings and minutes will be taken by a member of their staff.

5. Membership

Council must appoint all Committee members. Appointment must take place prior to a member being conferred the responsibilities and rights as set out in this document.

Council may release individual members from the Committee at any time by a resolution of Council. Council may also appoint any new members to a Committee at any time by a resolution of Council.

Membership is to include:

- 2 Councillors
- 6 relevantly qualified community representatives
- 1 Department of Planning and Environment representative
- 1 DPI Fisheries - Cape Byron Marine Park representative
- 1 National Parks and Wildlife Service representative

Constitution: Coastal Estuary Catchment Committee

- 1 Arakwal Corporation representative
- 1 representative from each of the coastal Local Aboriginal Land Councils (LALCs)
- Byron Shire Council General Manager (or staff member delegate)

Note: Staff members and State Agencies participating on the Committee do not have any voting entitlements.

6. Induction

All members will be required to participate in an induction process at the establishment of a new Committee, and at any time a replacement voting member joins a Committee. The induction will be scheduled prior to the first meeting of the Committee and will cover topics such as this Constitution, the Code of Meeting Practice, Conflicts of Interest and Code of Conduct.

Replacement voting members will be inducted by experienced Committee members at, or prior to, their first meeting.

7. Quorum

A quorum is to constitute at least half the number of members plus one (resulting half numbers go down), one of which is to be a Councillor. The General Manager or delegate, who must be a member of staff, is to attend the Committee meeting and is not counted in the quorum for the meeting.

8. Confidentiality

Members of the Committee will, in those circumstances where confidential matters are subject to deliberation, maintain confidentiality.

9. Election of Chairperson

The position of Chairperson is to be elected from Councillors comprising the Committee but only in circumstances where the Mayor elects not to assume the position of Chairperson.

10. Voting

- a) Each member of the Committee (with the exception of staff members) is to have one vote, with the Chairperson to have a casting vote in addition to a deliberative vote.
- b) Members of the Committee who are not Councillors may abstain from voting in any circumstances without such abstention being recorded in the negative.

11. Majority Decision

A majority decision of the Committee requires a majority of elected members to be present and voting on any item subject to the requirements of a quorum being met at the meeting.

Constitution: Coastal Estuary Catchment Committee

12. Convening Meetings

Meetings will be held as required, generally every quarter. An annual timetable of meetings will be prepared in advance and adopted by Council for the following 12 months.

A meeting of the Committee may be convened in response to either the direction of the Mayor (or in the Mayor's absence the Deputy Mayor) in written form to the General Manager; or two Councillors in written form to the General Manager, or by resolution of the Council.

13. Agenda Preparation

It is the responsibility of the chairperson to prepare the agenda in consultation with the relevant Director, setting out the terms of business to be considered.

The agenda is an organised list of the business, in order, that will be transacted at the meeting. An agenda for each meeting, containing a brief report on each item, is to be provided to Committee members and available on Council's website at least 7 days prior to the meeting being held.

Each item of business to discuss at the meeting is required to be listed on the agenda and in written form. Verbal reports at the meeting are not an acceptable practice.

For some matters, it will be necessary to attach other relevant information to the agenda to inform and direct discussion. Such information is to be circulated with the agenda.

Committee members may request items for inclusion in future agendas, through the Chair.

14. Conduct of Business

Each item of business is discussed in the order in which it appears on the agenda. No new matters will be introduced at the meeting. New items of business may be included in a future agenda as noted in clause 13 above.

15. Records of meetings

- a) The minutes of meetings are to be circulated to members of the group within 7 days of the meeting so that members can provide feedback through the Chair on the draft unconfirmed minutes.
- b) Any recommendation of a Committee that requires a resolution of Council will be reported to Council through a staff report to Council from the responsible Directorate for the Committee, and the staff report will include as an attachment, a copy of the minutes of the Committee meeting at which the recommendation was made.

16. Absence from Committee Meetings

All Committee members are required to advise the chair when they are unable to attend Committee meetings. The absence of Committee members from the meeting is to be recorded in the minutes. A Committee member (other than the Mayor) ceases to be a member of a Committee if the member:

Constitution: Coastal Estuary Catchment Committee

- a) Has been absent from three consecutive meetings of the Committee without having given reasons acceptable to the Committee for the member's absence, or
- b) Has been absent from at least half of the meetings of the Committee held during the immediately preceding year without having given to the Committee acceptable reasons for the member's absences.

17. Section 377 Delegation

The Committee does not have any delegated functions pursuant to section 377 of the Local Government Act (1993) and does not have the power to direct staff.

18. Meeting Practice

Meetings are to be conducted in accordance with this Constitution and, where required, reference to Council's Code of Meeting Practice.

19. Miscellaneous

- a) **Insurance:** All group members are covered by the public liability policy of Council. This insurance does not preclude the Committee from due diligence and all Council policies must be adhered to.
- b) **Code of Conduct:** All group members to abide by Council's adopted Code of Conduct at all times.
- c) **Pecuniary Interest:** Pecuniary Interest may be defined as an interest that a person has in a matter, as a group member or employee of a company or other body, because of a reasonable likelihood or expectation of appreciable financial gain or loss to the person, or another person with whom the person is associated. Such other person includes the spouse or de-facto partner or relative of the group member.

Section 446 of the Local Government Act states that "a member of a council committee, other than a committee that is wholly advisory, must disclose pecuniary interests..."

Even though the Local Government Act provides an exemption to disclose pecuniary interests Council's preference is for all members to declare pecuniary interests where applicable.

- d) **Work Health Safety:** All group members are required to comply with the "Worker Responsibilities" as prescribed in the Work Health Safety Policy.

Report No. 3.5 Consideration of Dredging of Capricornia Canal and Marshalls Creek and the Removal of the Marshalls Creek Training Walls

Directorate: Sustainable Environment and Economy

5 **Report Author:** Chloe Dowsett, Biodiversity and Sustainability Coordinator
James Flockton, Infrastructure Planning Coordinator
Scott Moffett, Drainage & Flood Engineer, IS - Works - Infrastructure Planning

File No: I2022/699

10 **Summary:**

At the 26 May 2022 Council meeting, a Notice of Motion was brought to Council in relation to potential flood mitigation options for the North Byron Shire community and the requests for dredging of Marshalls Creek and/or modification to rock walls at Brunswick Heads.

Council subsequently resolved the below (**Res 22-212**):

15 *That Council refers the requests raised by the North Byron Shire community regarding dredging the Capricornia Canal and Marshalls Creek to Council's Coastal and ICOLL Advisory Committee and Floodplain Management Committee with a view to consider the requests; in particular the option of removing the Marshalls Creek rock walls at Brunswick Heads and its potential to reduce siltation of Marshalls Creek.*

20 This report provides general background information for members of the Coast and ICOLL Advisory Committee on the issues raised, the development of the North Byron Floodplain Management Study and Plan and the assessment of flood mitigation options.

25 The process followed in the North Byron Floodplain Management Plan has not resulted in the broader community accepting that dredging or rock wall changes will have limited impact on flood levels. As such, it is proposed to discuss at the committee meeting the following questions:

1. Why haven't the outcomes of the North Byron Floodplain Risk Management Plan (WMA Water, 2020) been accepted by the community?
2. Should Council complete further studies?
- 30 3. If further studies were completed, what should be included in the scope?
4. If further studies were to be completed, what funding may be available?

35 On Thursday the 16 June 2022 Council's Floodplain Management Advisory Committee discussed this same topic and the request for dredging and removal of Marshalls Creek rock walls. The committee recognised that for some groups in the community sentiment is still strong for management options such as dredging or rock wall changes that are not

BYRON SHIRE COUNCIL

STAFF REPORTS - SUSTAINABLE ENVIRONMENT AND ECONOMY

3.5

supported by the FRMSP due to their limited impact on flood levels. Committee members acknowledged that further exploration and consultation on these options may be required and recommended that staff prepare a (consultancy brief) scope of work for review by the committee at the next available meeting.

5 **Committee Recommendation:**

That Council endorse the Floodplain Management Advisory Committee receiving a further report with a proposed scope that includes recommendations received from the committee

10 This report provides an outline on the issue to facilitate further discussion by the Coast and ICOLL Advisory Committee.

RECOMMENDATION:

15 **That the Coast and ICOLL Advisory Committee notes the report and outline of the issue.**

That the Coast and ICOLL Advisory Committee notes that the Floodplain Advisory Committee will be receiving a further report with a proposed scope that includes recommendations received from the committee.

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Report

5 Council have resolved that Council's Floodplain Management Advisory Committee and Coastal and ICOLL Advisory Committee consider the requests raised by the North Byron Shire community regarding dredging the Capricornia Canal and Marshalls Creek with a view to consider the requests; in particular the option of removing the Marshalls Creek rock walls at Brunswick Heads and its potential to reduce siltation of Marshalls Creek.

This report provides an outline of some key points for the Committee's consideration in relation to the request.

Flood Risk Management Options (Dredging and Removal of Rock Walls)

10 The North Byron Floodplain Risk Management Study (WMA Water, October 2020) was developed by a reputable consultant with expertise in flood modelling and flood risk management. The development of flood plans follow a step-by-step process in accordance with the State Government Flood Manual in close consultation with experts within the State Government flood department. The inclusion of options within a Floodplain Risk
15 Management Plan is based on robust science, modelling, sensitivity testing and expert knowledge.

Staff are aware that historical / legacy issues arise each time there is a flood event and our community has been significantly impacted, however to pursue management options that have already been assessed through a robust scientific process and deemed unfeasible
20 results in loss of focus and distraction from implementation of actions in an endorsed Plan.

The North Byron Floodplain Risk Management Study (henceforth "Flood Study") investigated a number of options in relation to dredging and the removal of rock walls. The Flood Study can be accessed at
25 <https://www.byron.nsw.gov.au/files/assets/public/hptrim/land-use-and-planning-planning-strategies-working-documents-north-byron-coastal-creeks-flood-study/e2021-43013-north-byron-floodplain-risk-management-study-web.pdf>

As outlined below, none of these options provided a level of flood mitigation that resulted in them being a recommended action in the Floodplain Risk Management Plan.

30 **Option RW – Rock Wall Modifications:** This option modelled the impact of complete removal of Marshalls Creek east wall and lowering of the minor wall at the confluence of Marshalls Creek and Brunswick River.

In the 1% AEP event this option had no impact on flood levels, as the walls are already submerged in larger flood events and therefore modification is not shown to improve flooding in the area. Consequently, it was not recommended that this option be progressed
35 to detailed assessment. However, it was recommended that Council consider development of a sediment transport model to investigate modification to the rock walls for the purpose of improved sediment transport (refer later part of this report – '**Recommended Investigation**').



Diagram 28: Option RW – Rock wall modifications (page 103 of the Flood Study)

Option TW – Removal of Brunswick River Training Walls: This option modelled the removal of training walls located at the mouth of Brunswick River. Both training walls were removed in the model, and the ground level was set to the adjacent sea level (from 0 m AHD to -5 m AHD).

Preliminary modelling results for the removal of the Brunswick River training walls show a widespread decrease in flood levels, however this decrease is a maximum of up to 0.1 m at Brunswick Heads and 0.03 m (i.e. 3 cm) at New Brighton and at the Pacific Motorway. Benefits extent approximately 4 km upstream of the mouth, however are relatively minor. Due to the limited flood mitigation benefits that could be provided and the uncertainty of the potential impact on coastal processes in the area, this option was not recommended to proceed to detailed investigation.



Diagram 29: Option TW – removal of Brunswick River training walls (page 104 of the Flood Study)

Option MC – Marshalls Creek Dredging at Ocean Shores: Option MC investigated dredging along Marshalls Creek. The option was modelled assuming the riverbed was lowered by 0.5 m from just to the east of the Pacific Motorway Bridge near Billinudgel down to the confluence of Marshalls Creek with Brunswick River (approximately 7.5 km). [This option does not include dredging of the urbanised parts of the Capricornia Canal, but of the approaches to the canal as per Diagram 32].

Preliminary results for MC show a maximum decrease in flood levels of potentially up to 0.05 m (i.e. 5 cm) in Ocean Shores and New Brighton and 0.01 m in South Golden Beach. Due to the limited impact of dredging on flood behaviour, and the likely considerable economic and environmental impacts, this option was not recommended for further consideration.



Diagram 32: Option MC – Marshalls Creek Dredging (page 109 of the Flood Study)

It is not unusual for dredging to provide limited if any flood mitigation results when modelled. Dredging of Marshalls Creek has been investigated many times before with minimal reduction in flood levels likely to be achieved. Dredging is generally undertaken for commercial purposes, sand extraction/beach nourishment and/or to improve navigation – generally not for flood mitigation. This is usually because it does not create more storage or a mechanism to greatly alter flood levels because the dredged area fills with water and only allows for an increase in flow velocities. Further it can fill in again quite quickly with sediment moving in the creek system. Dredging may also increase the tidal range in estuaries or otherwise transform the tidal signature.

The level of the ocean at the entrance of the Brunswick River has a major influence on flood levels in the lower reaches of Marshalls Creek, particularly downstream of the Orana Bridge. As such, much of the floodplain is prone to inundation due to elevated ocean water levels entering the estuary [i.e. lower catchment flood levels tend to be dominated by ocean levels].

Dredging campaigns in the Brunswick Estuary have historically been undertaken to improve the navigability of the estuary entrance for the commercial fishing fleet.

Generally, the benefits have been short-lived with the dredging channels quickly filling in due to sediment deposits from the high littoral transport system along the coastline.

- 5 Dredging activities have, however, changed the tidal prism of the Brunswick Estuary and have therefore altered the salinity regime, increased turbidity, and reduced areas of important habitat, such as shallow water, seagrass and intertidal mud banks. The ecological value of the estuary is unique falling within the Cape Byron Marine Park and National Park estate, and the impact of dredging to this waterway and aquatic ecosystems would be significant.
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- Significant concern has been raised over the years regarding the environmental impacts of dredging and the overall benefits of dredging. The last dredging campaign in the Brunswick Estuary was [to staff's knowledge] completed by Crown Lands in 2015 where Council raised numerous concerns about the campaign. Additionally, past community
- 15 consultation during the preparation of the Marshalls Creek Floodplain Management Plan (Patterson Consultants, 1997) rejected dredging as a means of dealing with the flooding issues along Marshalls Creek.

Siltation in Marshalls Creek

- The Brunswick River Estuary is a system dominated by ocean processes in the lower reaches. There is a constant push of sand into the lower reaches due to the high littoral drift of sediment up the coast from south to north. This is evident in the formation of bars within the entrance.
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- Channel conditions of Marshalls Creek have been reviewed on a number of occasions as outlined in the Marshalls Creek Floodplain Management Plan (1997). A previous
- 25 investigation (Robin Warner investigation, date unknown) indicates three sources of the materials namely:

- Fluvial (riverine) material upstream of Balemo Drive/Gooloo Close intersection
 - Reworked coastal sand from Balemo Drive/Gooloo Close to Orana Bridge; &
 - Marine sands downstream of the Orana Bridge that were considered as a flood tide delta (large body of sand that ingresses into the Creek during the flood/incoming
- 30 tide).

- The investigation indicated that the marine sand is very mobile in its upper layers and that much of the marine sand had probably been introduced since the construction of the Brunswick River training walls and north wall. However this view is discounted in the 1997 Flood Management Plan, "*The view that siltation has occurred solely as a result of the training walls is contradicted by historical oblique photographs of the estuary*".
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Historical photos are provided below which show the outline of the flood tide delta early-1960s, pre-construction of the training walls.

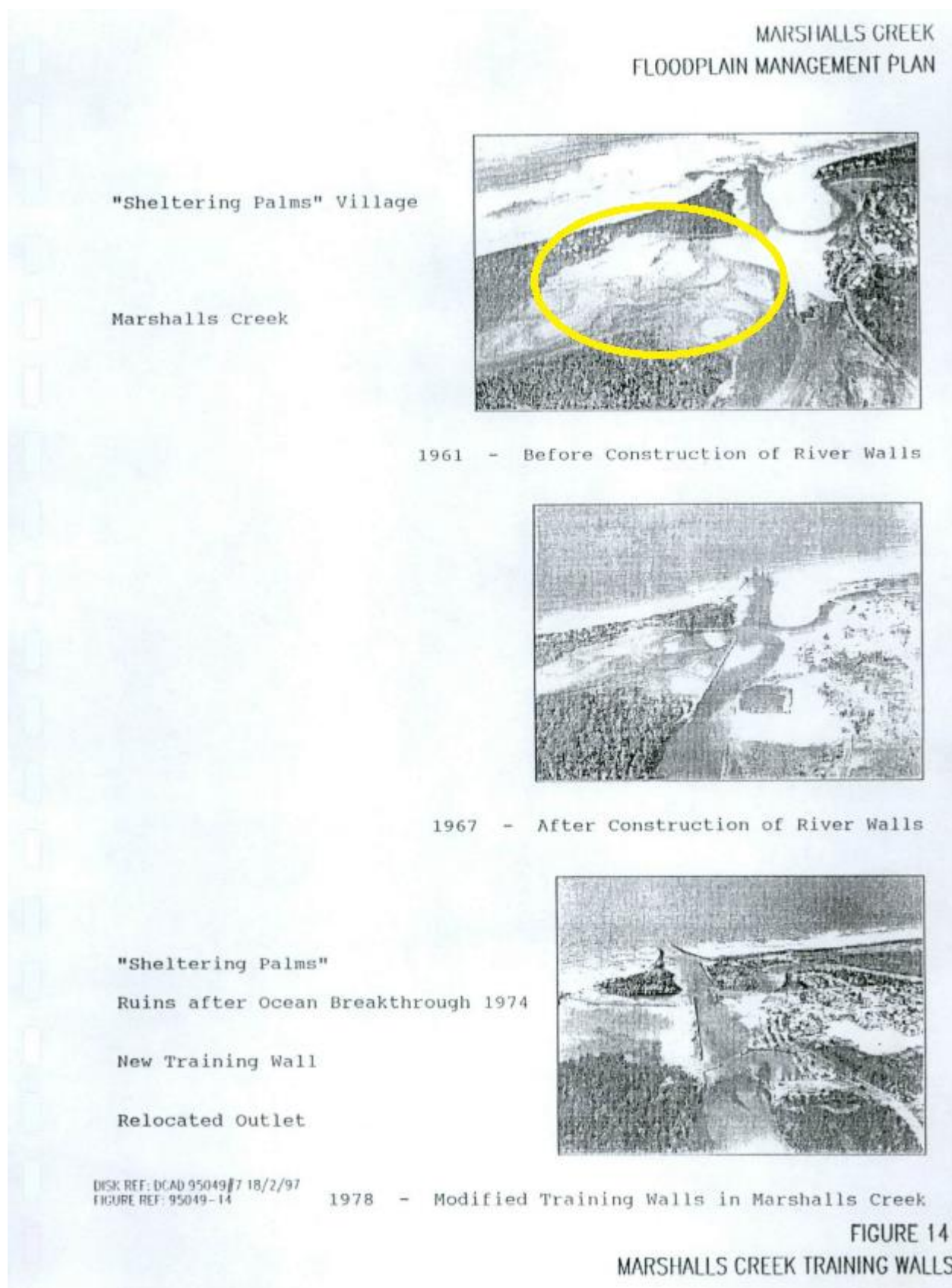


Figure 14 from the Marshalls Creek Floodplain Management Plan (Patterson Consultants, 1997) with yellow circle outlining sandy flood tide delta pre-construction of river walls.



Aerial Photo (dated 1958) [flood_story33 \(brunswickvalley.com.au\)](https://www.brunswickvalley.com.au/flood_story33) with with yellow circle outlining sandy flood tide delta pre-construction of river walls.

Recommended Investigation

- 5 A recommended action from the North Byron Floodplain Risk Management Plan (WMA Water, 2020) is:

RW02 – Develop a sediment transport model to investigate modification to the rock walls, as part of the Coastal Management Program for the Brunswick Estuary

- 10 This action to develop a sediment transport model to investigate modification to the rock walls for the purpose of improved sediment transport and flood mitigation. This study was proposed as a first-step action to investigate sediment transport at the confluence of Marshalls Creek and the main stem of the Brunswick River, in an attempt to further investigate whether the modification of the rock walls may result in improved sediment transport. This study is related to pursuing feasible management options that provide a level of flood mitigation and once complete, the outcomes may be incorporated in any updated flood modelling or assessment.

20 Council is in the process of preparing Coastal Management Programs (CMPs) for its parts of the Byron Shire coastline, prioritising the Open Coast and ICOLLs in the four-stage process set out to develop the long-term strategy. Council has not yet commenced the development of a CMP for the Brunswick Estuary.

However, as part of Council's preparation of CMPs for the Open Coast and ICOLLs, Council has commissioned the Byron Shire Coastal Hazard Assessment, currently underway, which will cover the entire spatial extent of the Shire's coastline and will inform

the CMP. A key task of the Hazard Study is the development of a quantified conceptual sand transport model for the coastal zone. The preparation of a sand transport model will include detailed assessment of:

- 5 • coastal geomorphology and geophysical setting
- marine and shoreline sediments
- wave climate and coastal processes
- time history of anthropogenic changes along the coastline (including minor and major works such as the Brunswick River training works)
- 10 • sediment budgets and the influence of natural and anthropogenic changes on sediment sources and sinks (sediment gains or losses determine whether shorelines will either erode or accrete).

Development of the sediment budget requires consideration of the various possible sources of sand, transport pathways, sinks, and agents of transport. The Brunswick River entrance is a known key source and sink of sediment which will be assessed in detail through this analysis as part of the study. Development of a quantified conceptual sand movement model is important as it focuses on sand transport (or sediment transport) and the key drivers that govern the processes of sand movement. The forcing agents (where does the sand come from and how?) will also be considered in the context of a changing climate. Understanding sediment transport is essential to inform decision making on potential coastal management options to address coastal hazards and/or key issues such as sedimentation. This study focusses on the open coast and coastal hazards and will only provide detail for the entrance and lower reach of the Brunswick Estuary only, however the model may be built upon as a subsequent study (pending approval, resources and capacity).

Key issues

The process followed in the North Byron Floodplain Risk Management Plan has not resulted in the broader community accepting that dredging or rock wall changes will have limited impact on flood levels. As such, it is proposed to discuss at the committee meeting the following questions:

- Why haven't the outcomes of the North Byron Floodplain Management Plan been accepted by the community?
- Should Council complete further studies?
- If further studies were completed, what should be included in the scope?
- 35 • If further studies were to be completed, what funding may be available?

On Thursday the 16 June 2022 Council's Floodplain Management Advisory Committee discussed this same topic and the request for dredging and removal of Marshalls Creek rock walls. The committee recognised that for some groups in the community sentiment is still strong for management options such as dredging or rock wall changes that are not supported by the FRMSP due to their limited impact on flood levels. Committee members acknowledged that further exploration and consultation on these options may be required and recommended that staff prepare a (consultancy brief) scope of work for review by the committee at the next available meeting (refer below).

Committee Recommendation:

That Council endorse the Floodplain Management Advisory Committee receiving a further report with a proposed scope that includes recommendations received from the committee

5 Strategic Considerations

Community Strategic Plan and Operational Plan

CSP Objective	CSP Strategy	DP Action	Code	OP Activity
Community Objective 3: We protect and enhance our natural environment	3.3: Partner to protect and enhance the health of the Shire's coastlines, estuaries, waterways and catchments	3.3.1: Implement Coastal Management Program	3.3.1.1	Continue preparing a Coastal Management Program (CMP) in accordance with the staged process for Cape Byron to South Golden Beach

Recent Resolutions

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10 Legal/Statutory/Policy Considerations

Not applicable

Financial Considerations

Development of a conceptual sand/sediment transport model is part of the Byron Shire Coastal Hazard Assessment is currently funded. Any other studies are unfunded.

- 15 Additional studies for further consideration of flood mitigation options should be undertaken through Council's Floodplain Risk Management process as opposed to the Coastal Management Process.

Estimating the costs of further studies is difficult without a clear scope.

Consultation and Engagement

- 20 Extensive consultation and engagement was undertaken during the public exhibition stage of the North Byron Flood Risk Management Study and Plan (FRMSP) prior to adoption in 2020.